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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,754	10/12/2001	Masaki Aoki	NAK1-BP48	8844

7590 10/06/2003

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EXAMINER

TRAN, CHUC

ART UNIT	PAPER NUMBER
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2821

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/889,754

Applicant(s)

AOKI ET AL.

Examiner

Chuc D Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-15, 17 and 26-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-15, 17 and 26-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Claim Objections

1. Claims 1, 6, 10, 14, 18, 19, 25, 40, and 46-50 are objected to because of the following informalities:

Claim 1, Line 16, change "a" to - - the - -;

Claim 6, Line 3, change "a" to - - the - -;

Claim 10, Line 18, change "a" to - - the - -;

Claim 14, Line 3, change "a" to - - the - -;

Claim, 18, Line 2, change "a" to - - the - -;

Claim, 19, Line 2, change "a" to - - the - -;

Claim, 25, Line 2, change "a" to - - the - -;

Claim, 40, Line 2, change "a" to - - the - -;

Claim, 46, Line 3, change "a" (first layer) to - - the - -;

Claim, 46, Line 3, change "a" (first dielectric) to - - the - -;

Claim, 46, Line 5, change "a" (second layer) to - - the - -;

Claim, 46, Line 5, change "a" (second dielectric) to - - the - -;

Claims, 47-50, Line 1, change "a" to - - the - -.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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3. Claims 6, 7, 15, and 43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As in claims 7, 15, and 43, the paragraph “the constant of the electric layer is 6 or more and less than 9” lacks proper antecedent in that it renders the claim language vague and indefinite. As is presented, the elements required in making up the referenced functional of element are unknown. As is, the claim merely describes a range of a thickness of the dielectric layer formed on the electrodes. Applicant is encouraged to implement this type of language in the interest of improving it’s clarity.

Also in claims 6 and 15, claim 15 does not further limit of claim 6, the range of the thickness claimed in claim 15, i.e. 6um to 9um, is out of the range of thickness claimed in claim 6, i.e. 3um to 5um. Explanation is required.

Double Patenting

4. Claims 17, and 31-34, are objected to under 37 CFR 1.75 as being a substantial duplicate of claims and 35-39 . When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claims not consider

5. Claims 42, 44, and 46 are not consider, they are depended on cancelled claims 19, 21, 23. Appropriate correction is required.

Claim Rejections - 35 USC § 102

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6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-7, 9-15, 17, and 26-50 are rejected under 35 U.S.C. 102(e) as being anticipated by Murai et al (USP. 6,291,943).

Regarding claims 1-7, 9-15, 17, and 26-50, Murai et al disclose a gas discharge panel display comprising:

- a facing pair of substrate (11, 21), a plurality of ribs (30), a plurality of spaces (40), a phosphor layer (31) filled with discharge gas xenon (Col. 6, Line 44), so as to form a plurality of discharge spaces (Col. 4, Line 55) (Fig. 1); wherein

- xenon contained in the discharge gas is in a range of 5% to 90% (Col. 12, Line 53);
- plural pairs of display electrodes (12a, 12b, 22) covered by dielectric layers (13, 23) (Fig. 1) (Col. 4, line 45), and the distance between two electrodes is in a range of 20um to 90um (Col. 14, Line 7); wherein

- the first dielectric layer (13) with a thickness range between 3um to 25um (Col. 5, Line 1), and the second dielectric layer (23) made of dielectric material related to the first layer (Col. 5, Line 64)

- applying voltage between the pair of the display electrodes (Col. 5, Line 11);
- glow discharging in selected discharge spaces (Col. 18, Line 17&30);
- converting ultraviolet light into visible light (Col. 5, Line 17);

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- accumulating electric charge in the dielectric layer (Col. 9, Line 48);
- the dielectric layer is made by laminating at least two different dielectric materials (Col. 5, Line 1&64);
- the electric field strength of 37V/cm.Pa or more is generated in the selected discharge spaces, when the predetermined voltage is applied (Col. 18, Line 20) (See table 1, Col. 17) (See abstract).

Citation of relevant prior art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art Yoshimura (USP. 6,097,146) disclose a phosphor for plasma display panel.

Prior art Stoller (USP. 5,828,356) disclose a plasma display.

Prior art Moore (USP. 6,452,332) disclose a fiber based plasma display.

Prior art Wedding, Sr. (USP. 5,793,158) disclose a gas discharge plasma display.

Prior art Stooler (USP. 6,184,849) disclose an AC plasma display.

Prior art Moore (USP. 6,247,987) disclose a process for making array of fibers used in fiber based displays.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuc D Tran whose telephone number is (703)306-5984. The examiner can normally be reached on M-F Flex hours.

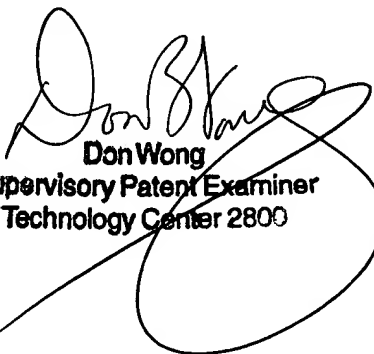
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (703)308-4856. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

TDC

September 18, 2003


Don Wong
Supervisory Patent Examiner
Technology Center 2800